

ABSTRACT OF THE DISCLOSURE

A substrate processing apparatus is used for removing surface irregularities occurring on a peripheral portion (a bevel portion, an edge portion, and a notch) of a substrate, such as a semiconductor wafer, and films deposited as a contaminant on the peripheral portion of such a substrate. The substrate processing apparatus includes an edge-portion polisher for pressing a polishing tape against an edge portion of a substrate and causing relative movement between the polishing tape and the substrate to polish the edge portion of the substrate, and a bevel-portion polisher for pressing a polishing tape against a bevel portion of the substrate and causing relative movement between this polishing tape and the substrate to polish the bevel portion of the substrate.